What are COVID-19 vaccine breakthrough cases?
COVID-19 vaccines are very safe, highly effective at preventing serious illness, and even prevent symptoms of COVID and transmitting disease. A very small percentage of fully vaccinated people will still get COVID-19. These are known as COVID-19 vaccine breakthrough cases.

People are considered fully vaccinated two or more weeks after they get a single dose of the Johnson & Johnson (Janssen) vaccine or the second dose of a two-dose series (Pfizer and Moderna vaccines).

COVID-19 vaccine breakthrough cases are only reported for vaccines approved by the Food and Drug Administration (FDA). They are not reported for non-FDA-approved vaccines, such as AstraZeneca.

What causes COVID-19 vaccine breakthrough cases?
Even though the COVID-19 vaccines are highly effective, they are not 100% effective. Some people who are fully vaccinated against COVID-19 will still get infected with COVID-19. You can also be fully vaccinated and get infected, but not have any symptoms.

What percentage of people who receive COVID-19 vaccines become infected after being fully vaccinated?
Nationally, only a small percent of fully vaccinated people got COVID-19.

From January 2021 to April 2021, only 10,262 breakthrough cases out of 101 million people vaccinated in the US and US territories were reported. That's about 1 person per 10,000 people or 0.01%.

As of May 1, 2021, the Centers for Disease Control and Prevention (CDC) is only reporting breakthrough cases for people who were hospitalized or died. The CDC reported 2,454 of these breakthrough cases out of more than 130 million people fully vaccinated. That's about fewer than 1 person per 10,000 people or 0.01%.

How do fully vaccinated people with COVID-19 know that they are infected?
A vaccinated person may or may not have symptoms if infected with COVID-19. If you have any symptoms of COVID-19 following vaccination, stay home, call a healthcare provider, and get tested. If a fully vaccinated person tests positive for COVID-19, even if the person has no symptoms, the person should isolate at home and follow RIDOH instructions for isolation.

Can fully vaccinated people who get COVID-19 spread it to others?
We know from early studies that the COVID-19 vaccines are very effective at preventing the spread of COVID-19 to others. The fact that our positivity rate among vaccinated people is very low is a strong indicator of how effective COVID-19 vaccines are.

We are still learning how well vaccines prevent people from spreading the virus that causes COVID-19 to others, even if they do not have symptoms. Early data shows that vaccines help keep people with no symptoms from spreading COVID-19.

Are breakthrough cases in the United States due to infection with COVID-19 variants?
The COVID-19 vaccine is currently very effective in protecting against COVID-19 variants currently in the US and US territories. However, variants are causing some breakthrough cases.